

A holistic care approach to combat the COVID-19 disease

Priya Kotwani¹, Vaibhav Patwardhan¹, Geetika Madan Patel²,
China-Lee Williams¹, Ekta Modi³

¹Parul Institute of Public Health, Parul University, P.O. Limda, Ta. Waghodia Vadodara, ²Parul Institute of Medical Sciences and Research, Parul University, P.O. Limda, Ta. Waghodia Vadodara, ³Parul Sevashram Hospital, Parul University, P.O. Limda, Ta. Waghodia Vadodara, Gujarat, India

ABSTRACT

Background: Coronavirus disease-2019 (COVID-19) pandemic is spreading like a wildfire across the globe. For its containment, measures such as isolation and quarantine are followed. The patients tested positive for COVID-19 disease are kept in isolation with no interaction with the family members leading to negative mental health consequences. To address this, Parul Sevashram Hospital adapted to a more holistic approach to treatment. **Methodology:** A process documentation of the best practices was undertaken. Key Informant Interviews (KIIs) were used to gather responses of the project implementers ($n = 2$), physiotherapists ($n = 2$), dietician ($n = 1$), Ayurveda practitioners ($n = 2$), and staff nurses ($n = 2$) who were mainly involved in tailoring the package of services to be offered as well as their implementation. In addition, KIIs were also conducted with the patients ($n = 10$) their views on the additional package of services offered to them and the overall level of satisfaction with the care. **Findings:** The holistic care services involved diet therapy, physiotherapy and yoga, AYUSH medicines for boosting immunity, music therapy and books and indoor games. Few implementation challenges include convincing healthcare workers for providing care to COVID patients, availing raw materials for preparing AYUSH medicines during lockdown. Trainings were also provided to HCW on infection control practices, provided monetary incentive and mobilised the existing resources for addressing the challenges. **Conclusion:** The holistic care has potential influence on patient's mental health, recovery rate, and satisfaction of COVID-19 patients. These approaches can be up-scaled with a minimum investment and has a potential to benefit patients both in public and private hospitals.

Keywords: COVID-19, holistic care, mental health, patient satisfaction

Introduction

The world is combating the ongoing COVID-19 pandemic. The widespread impact of COVID-19 resulted in the implementation of stringent public health measures to lessen the incident rates of the virus.^[1] COVID-19 presented itself with flu-like symptoms in majority of the cases, which meant a large percentage of

infected individuals were unaware that they were infected.^[1] These symptoms consisted of a mild fever, sore throat, cough, fatigue and shortness of breath. A staggering amount of cases were asymptomatic, where infected individuals showed no clear symptoms related to COVID-19. As the number of cases increased, the death toll followed, and considering no cure existed, prevention strategies to disrupt transmission were implemented globally.

Mass testing was encouraged and once tested positive the individuals were kept in isolation centres for a period of 14 days, the indicated incubation period.^[2] During this period the patient is shut out from the world, contact is restricted to only the medical

Address for correspondence: Dr. Geetika Madan Patel,
Parul Institute of Medical Sciences and Research, Parul University,
P.O. Limda, Ta. Waghodia Vadodara, Gujarat - 391760, India.
E-mail: medicaldirector@paruluniversity.ac.in

Received: 28-07-2020

Revised: 29-09-2020

Accepted: 28-10-2020

Published: 27-02-2021

Access this article online

Quick Response Code:



Website:
www.jfmpc.com

DOI:
10.4103/jfmpc.jfmpc_1549_20

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: WKHLRPMedknow_reprints@wolterskluwer.com

How to cite this article: Kotwani P, Patwardhan V, Patel GM, Williams CL, Modi E. A holistic care approach to combat the COVID-19 disease. J Family Med Prim Care 2021;10:844-9.

staff who monitors the patient on a regular basis.^[3] Suspected cases are confined to quarantine facilities for the same amount of time, and tested before they are allowed to leave again.^[3]

Presently, India has the third-highest recorded cases (1.04 million cases) with 654 recovered, and 26,273 recorded deaths.^[2] An upsurge in cases consequently also resulted in a larger percentage of the population being kept in isolation for the specified recovery duration. Although these measures were necessary, the negative underlying effects of prolonged isolation on mental health outcomes, especially among COVID-19 patients became more evident.^[4] Limited interaction with family members, or loved ones, and being confined to just one space or building, reasonably so, affected the mental wellness of the COVID-19 patients. Besides, many researchers linked depression, feeling of helplessness and suicidal thoughts with prolonged isolation and fear of the unknown.^[4,5] The panic caused by the media, and the negative narrative portrayed painted COVID-19 as a death sentence, resulting in stigmatization of positive patients and feelings of self-pity.^[4] This required the broadening of COVID-19 treatment efforts, to not only address the effects of the virus on the body, but also possible effects on the patients' mental health calling for a more comprehensive approach to dealing with COVID-19. As per WHO, primary healthcare encompasses broader determinants of health that largely covers all the aspects of health and wellbeing holistically.^[6] This holistic approach by the primary care physicians towards the current outbreak—as well as the measures taken to control it will have a profound impact on psychological and socioeconomic well-being.^[7] The Parul Sevashram Hospital located in Vadodara, is one of the healthcare facilities in India that implemented this strategy of focusing not only on improving mental health outcomes of COVID-19 patients, but also incorporating AYUSH Medicines (traditional herbs and medicines) designed to boost immunity into the patient's treatment regimes.

Although the allopathic medicine is at the forefront for dealing with the menace of ongoing pandemic, the potential of complementary and alternative medicines (CAM) should be considered as an adjuvant therapy.^[8] The CAM provide a holistic approach to therapy as they help strengthen the immunity of the patient to battle the disease.^[9] In addition, practices such as yoga (postures), seated meditation and pranayama (breathing) are known to have anti-stress and anti-inflammatory effects and thereby can help reducing the severity of COVID-19 disease.^[10]

During this pandemic although priority is given to the successful recovery of the infected patients, the medical board of the Parul Sevashram Hospital went one step further. The holistic COVID care and management package offered to positively diagnosed cases encompassed not only treatment towards recovery, but also accounted for adverse psychological effects caused by being in isolation, working towards healing the body, mind and soul of the patient. The package focuses on five elements to full recovery, viz.

- (i) Diet Therapy, which ensures a healthy and nutritious diet plan to all patients,
- (ii) Music Therapy which evokes relaxation,
- (iii) Yoga and Exercise Therapy,
- (iv) Productive Engagements, which includes reading books or playing games with the patients, and
- (v) AYUSH medicines, which as mentioned before acts as immune boosters and consist of traditional Indian medicines and herbs.

With this approach, the Sevashram Hospital not only ensures the absence of physical ailments after the treatment process, but also addresses the possibility of mental and social infirmities, which in essence is the WHO regulated definition of health.

Methodology

To document the process of delivering the holistic care services to COVID-19 patients admitted to COVID Care Centre (CCC) at Parul Sevashram Hospital, Key Informant Interviews (KIIs) were used to gather responses of the project implementers ($n = 2$) on the rationale for conceptualising the holistic care package of services for COVID-19 patients. In addition, KIIs were also conducted with physiotherapists ($n = 2$), dietician ($n = 1$), Ayurveda doctors ($n = 2$), and staff nurses ($n = 2$) who were mainly involved in tailoring the package of services to be offered as well as their implementation.

The KIIs were conducted with the help of interview guide which had questions regarding rationale behind the conceptualisation of the holistic care package, services included in the basket of holistic care and the implementation strategy, early implementation challenges and addressal mechanism adopted to manage those challenges.

Moreover, interviews were also conducted with the patients ($n = 10$) to know whether they were aware of the holistic care of services that was offered to them, how did they utilise those services, their views on the additional package of services offered to them and the overall level of satisfaction with the care received at Parul Sevashram Hospital.

Institutional Permission to carry out the process documentation of holistic care services was sought. Enrolment of the study participants was voluntary and they withdraw at any time. Written informed consent was obtained from all the participants after explaining to them the study objectives, research methods and data collection techniques were explained to and understood by them.

Findings

The nature of the ongoing pandemic of COVID-19 is such that the individuals tested or suspected to be positive for the disease require to stay under isolation for containing the disease. Thus, during the initial days of establishment of CCC at Parul Sevashram Hospital, it was noticed by the healthcare workers that the patients often get irritated or frustrated during their long-stay

in the hospital and due to restrictions on social interaction imposed by the disease itself. Keeping in mind the behaviour of the patients as well as the tendency to have a personalised approach to the patient issues, the hospital management identified the need to engage the patients into various health-promoting activities. Therefore, the team of project implementers designed a package of holistic care services wherein the patients can engage in activities to cheer them up as well as services that would boost their immunity and improve their recovery.

Features of the holistic care services

Figure 1 highlights the composition of the five services offered to COVID-19 patients admitted to CCC at Parul Sevashram Hospital [Figure 1]

- a. **Diet Therapy-** The COVID-19 patients were provided with tailored diet. The diet provided was rich in protein, low on carbohydrates and fats. The diet was also enriched with a lot of antioxidants by including garlic, spices such as turmeric, clove, cinnamon, cardamom and medicinal herbs like Tulsi which are known to reduce chest congestion.^[11] Patient were given homely care and were provided with five meals a day. In addition, patients were provided with decoction (*kadha*) in the morning and Turmeric milk at the night. Also, provision for 24 × 7 availability of lukewarm water was made. Besides, dietary need of the patients with co-morbidities was also taken care of. Daily feedback from the patients were collected on the meals provided to them and variety in the daily meals was assured by the dietician.
- b. **Yoga & Exercise Therapy-** The CCC was equipped with television where *Upayoga* (simple *Yogasanas* for beginners which focus on exercising joints and muscles) were taught once from seven to eight in the morning. In addition, a team of physiotherapists trained the patients for performing breathing exercises and deep breathing with the intention of strengthening their respiratory muscles. Physiotherapists delivered these sessions in group for the mildly symptomatic

patients admitted in CCC. However, for the patients admitted to the Intensive Care Unit with an ability to perform mild breathing exercises were trained to perform specific set of chest exercise (viz. Thoracic mobility exercise, Chest Expansion exercise, Diaphragmatic breathing, etc., on one-to-one basis for 15 minutes. The participation of the patient was purely voluntary even then most of the patients preferred being a part of the session.

- c. **AYUSH KIT-** At the time of admission, the patient is provided with a kit which mainly comprises of Ayurveda medicines having a targeted effect on the body system (Medicine & its Uses in Table 1).

The kit was designed after consulting a group of expert Ayurveda practitioners. Knowledge regarding the benefits of AYUSH medicine was provided, however, the consumption of medicines was left to patient's will.

- d. **Music Therapy-** The provision was made for offering soothing music along with 'AUM' chanting through the mode of television as a relaxation therapy. The patients were made aware of this provision and could listen to it at one's own will.
- e. **Books and Indoor Games-** to keep the patients engaged a large variety of books for all age-groups were provided in CCC. Apart from this, provision was made for the indoor games such as Chess and Carom.

Human resource involved in delivering holistic care

The figure below highlights the various specialities of health workforce that was involved in delivering the package of services as well as their key responsibilities [Figure 2].

Early implementation issues & challenges and mechanism for their addressal

The first and the foremost challenge that the Project Implementers faced was to convince the healthcare staff to deliver the care to



Figure 1: Package of Holistic Care

Table 1: Composition of AYUSH Kit

Medicine	Uses	Dosage
Samashamani Vati	Indicated for febrile illness, and boosting immunity	500 mg tablet to be taken thrice a day
Khadiradi Vati	sore throat and indicated for upper respiratory tract infections	250 mg tablet to be taken twice a day
Dashamula Katutraya Dhanavati	upper as well as lower respiratory tract infections	250 mg tablet to be taken thrice a day
Sudarshana Dhanvati	Indicated for febrile illness	250 mg tablet to be taken thrice a day
Nasya Shadbindu Taila (nasal drops)	Indicated for rhinitis	2 drops in each nostril twice a day



Figure 2: Roles and responsibilities of human resource involved in delivering Holistic Care services

COVID-19 patients. Considering the hesitation of staff, series of online trainings from experts were arranged regarding the strict infection control practices that should be followed, and donning and doffing of personal protective equipment (PPE) kit. In addition, both the medical as well as paramedical staff were asked to offer their services on rotation basis. They performed their duties in the CCC and COVID-19 ICU for seven days following which they were kept in home quarantine for the next seven days. On resuming the duties, they were posted to non-COVID wards. This helped in limiting the exposure of healthcare workers to SARS-COV-2 virus. Moreover, monetary incentives were also provided to the healthcare workers rendering services to COVID-19 patients.

The other major challenge that came up was to procure essential item for delivering care during the COVID-19 induced lockdown. The institution was short of ingredients required to produce AYUSH kit in large quantities. After repeatedly persuading the manufacturers, raw materials were made available. The internal human resource was mobilised to then prepare indigenous AYUSH drug kit. It was also difficult to procure variety of vegetable to make sure that the diet provided to the patients does not become monotonous. It was also a challenge to procure new TV sets and Books, hence the already existing resources were mobilised and provided to the COVID-19 patients.

After initiating the delivery of holistic care, it was necessary to assure its proper utilisation. To address this, social worker approached the patients individually and made them aware of various services arranged for them. Few of the patients initially were reluctant to adopt the AYUSH kit. For this, Ayurveda practitioners counselled those patients telephonically and made them aware of its various benefits.

Patients' response to holistic care

A very warm response was received from the patients when they were approached to give their feedback on the Holistic Care that they received. This mix of services helped patients

keep themselves engaged the entire day and did not feel lonely in absence of their family members around. One patient said

I am getting discharged today. It is my fifteenth day here in Parul Sevashram Hospital and I felt very homely during my stay. I made new friends and also enjoyed playing games with them in the evening.

The other patient who was a teacher by profession said

I made use very productive use of my time at isolation ward. They provided with variety of books which I read during afternoon. This also motivated me to write my own poems. This time helped me relive my hobby.

The patients were very satisfied by the personalised care they received during their isolation period. They liked the food that was offered, immediate redressal of the issues they had by the staff nurses. All the possible measures were taken by the hospital management that patients do not return home with any bad memories.

Discussion

Researchers globally have been consumed in prioritizing the discovery of a cure or possible vaccine for COVID-19, however, the psychological effects this pandemic has had on the public seem to fall short in importance. The fear of the unknown, combined with the negative narrative portrayed by the media and being kept away from your loved ones for extended periods decrease the person's will to overcome the virus and be actively involved and abide to the treatment regime specified by the doctors. An evident increase in suicidal behaviours or thoughts have also been linked to prolonged self-isolation and among patients confined to isolation centres after positive diagnosis.^[12]

To positively respond to the COVID-19 treatment provided in isolation centres, the importance of a health mind and psych is a

fundamental factor to healing the body.^[13] A healthy functioning mind positively impacts the overall healing capability of the body.

Selective health professionals, across the globe, have considered alternative & complimentary medicines to combat COVID-19 infection, in addition to the conventional treatment.^[14] As mentioned earlier, COVID-19 more severely affects individuals with an impaired immune response, hence boosting the immune system has been identified as an effective response to the virus.^[14] The public is advised to consume a healthy diet and to also invest in immune-boosting options like citrus fruits. Additional activities like regular exercise, limiting alcohol and tobacco intake and regular sleeping patterns are also beneficial & contribute towards a better immune response.^[14]

A Holistic medicinal approach embraces both modern and complimentary treatment methods.^[15] The Holistic care possesses the potential to content the health providers and researchers by showing them the resourcefulness and paybacks of the use of complimentary or alternative medicine in sync with the modern medicine including both medicinal and surgical. The Holistic Care is reported to be advantageous for both service provider and receiver.^[16,17] The Comprehensiveness of holistic care package offered at CCC of Parul Sevashram Hospital that included nutritious diet and other immunity-boosting therapies significantly helped in patients' recovery. Moreover, the yoga, meditation, and breathing sessions in addition to amusing indoor games and books further relaxed the psychological distress due to the isolation and the disease.

Considering the above-mentioned studies and their reported positive outcomes and through the patient feedback received during the process documentation of Holistic Care, we can recommend that such comprehensive care approaches should be encouraged at a greater scale. The incorporation of such novel practices in treatment of COVID-19 pandemic will significantly augment the quality of care and condense the negative psychological aspect of isolation and hospitalization. Further, such patient-centric approaches must be encouraged to enhance the quality of life of COVID-19 positive patients kept in isolation. These services can be incorporated with a minimum investment and a possibility to gain greater returns in public and private hospitals.

The aforementioned services can have potential influence on patient's mental health, recovery rate, and patient satisfaction of COVID-19 patients. However, future research is required to evaluate and quantify the impact of the 'Holistic Care Approach'.

Acknowledgement

We would like to acknowledge the study team members viz. Dr. Shailesh Deshpande, Ms. Charmi Shah and Dr. Noopur Bhatt

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

References

1. Adhikari SP, Meng S, Wu YJ, Mao YP, Ye RX, Wang QZ, *et al.* Epidemiology, causes, clinical manifestation and diagnosis, prevention and control of coronavirus disease (COVID-19) during the early outbreak period: A scoping review. *Infect Dis Poverty* 2020;9:29.
2. WHO. Coronavirus disease (COVID-19) [Internet]. [cited 2020 Jul 19]. Available from: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019>.
3. Piguillem F, Shi L. The Optimal COVID-19 Quarantine and Testing Policies The Optimal COVID-19 Quarantine and Testing Policies * [Internet]. 2020 [cited 2020 Jul 19]. Available from: <https://www.researchgate.net/publication/340226829>.
4. Roy D, Tripathy S, Kar SK, Sharma N, Verma SK, Kaushal V. Study of knowledge, attitude, anxiety & perceived mental healthcare need in Indian population during COVID-19 pandemic. *Asian J Psychiatr* 2020;51:102083.
5. Mamun MA, Griffiths MD. First COVID-19 suicide case in Bangladesh due to fear of COVID-19 and xenophobia: Possible suicide prevention strategies. *Asian J Psychiatr* 2020;51:102073.
6. WHO. Primary health care [Internet]. [cited 2020 Oct 04]. Available from: <https://www.who.int/news-room/fact-sheets/detail/primary-health-care>.
7. Verhoeven V, Tsakitzidis G, Philips H, Van Royen P. Impact of the COVID-19 pandemic on the core functions of primary care: Will the cure be worse than the disease? A qualitative interview study in Flemish GPs. *BMJ Open* 2020;10:e039674.
8. Tillu G, Chaturvedi S, Chopra A, Patwardhan B. Public health approach of Ayurveda and Yoga for COVID-19 prophylaxis. *J Altern Complement Med* 2020;26:360-4.
9. Ponnamm HB, Raju AB. AYUSH Systems of Medicine, a Viable Solution for COVID-19 amidst the Uncertainty of Vaccination & Herd Immunity-an Indian Perspective Adeno Tonsillar Hypertrophy and Homoeopathy View project Comparison of Conventional and Homoeopathic Paradigms in Treating Children aged 0-18 Months: A Pragmatic, Randomized Clinical Trial View project. *Artic Asian J Pharm Res Heal Care* [Internet]. 2020 [cited 2020 Oct 06]; Available from: www.informaticsjournals.org/index.php/ajprhc.
10. Bushell W, Castle R, Williams MA, Brouwer KC, Tanzi RE, Chopra D, *et al.* Meditation and Yoga practices as potential adjunctive treatment of SARS-CoV-2 infection and COVID-19: A brief overview of key subjects. *J Altern Complement Med* 2020;26:547-56.
11. Upadhyay RK. Tulsi: A holy plant with high medicinal and therapeutic value [Internet]. Vol. 11, *International Journal of Green Pharmacy*. [cited 2020 Jul 19]. Available from: <http://greenpharmacy.info/index.php/ijgp/article/viewFile/869/594>.
12. Pfefferbaum B, North CS. Mental Health and the COVID-19 Pandemic. *N Engl J Med* 2020;383:510-2.
13. Brandslet S. Immune system and mental health are connected [Internet]. [cited 2020 Jul 27]. Available from: <https://medicalxpress.com/news/2019-08-immune-mental-health.html>.
14. Ali I, Alharbi OML. COVID-19: Disease, management,

- treatment, and social impact. *Sci Total Environ* 2020;728:138861.
15. Papathanasiou I, Sklavou M, Kourkouta L. Holistic nursing care: Theories and perspectives. *Am J Nurs Sci* 2013;2:1-5.
16. Ledger SD. The duty of nurses to meet patients' spiritual and/or religious needs. *Br J Nurs* 2005;14:220-5.
17. McSherry W, Cash K, Ross L. Meaning of spirituality: Implications for nursing practice. *J Clin Nurs* 2004;13:934-41.